

**REMARKS**

After the foregoing Amendments, claims 1-16 are currently pending in this application. Claim 16 has been added. Claims 1, 5, 8, 9, 12, and 15 have been amended.

An inadvertent error occurred in translating the original specification and claims of this application and therefore, "tin-plated" was used to describe the barrel pin instead of "nickel-plated". Paragraphs [0010] and [0025] of the specification and claim 5, have been amended to correct this error. Applicant has also enclosed herein, an affidavit, which further supports these amendments. Applicant submits that no new matter has been introduced into the application by these amendments because these amendments are supported by the priority-claimed prior foreign application (Taiwan Patent Application No. 92109155) and the original version of the specification of the present invention.

In view of the foregoing amendments and the following remarks, reconsideration of the remaining pending claims is respectfully requested.

**Rejection Under 35 U.S.C. §102(b)**

**Claims 9-15**

Claims 9-15 stand rejected under 35 U.S.C. 102(b) as being anticipated by Rinaldi (U.S. 3,452,149); "the '149' patent".

Claims 9 and 15 have been amended to further clarify that a wiring is fastened in a barrel pin by a taper recess formed on the barrel pin for an electrical connection between the barrel pin and the wiring. This feature is not anticipated/taught/suggested by the cited references.

Regarding Claims 9-15, the examiner asserted that Rinaldi discloses a wiring connection for a printed circuit board. The examiner also cited In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) for the proposition that “[t]he patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.”

After reviewing the cited reference of the ‘149 Patent, the Applicant respectfully submits that the present invention, which includes a wiring connection device comprising at least a barrel pin and at least a wiring fastened in the barrel pin by a taper recess formed on the barrel pin for an electrical connection between the barrel pin and the wiring, as provided in the amended Claim 9, is not disclosed by the ‘149 Patent. The reasons resulting in this conclusion are described as follows:

- (1) The amended Claim 9 is not a product-by-process claim.

Since the product or at least one of its elements would be recited in a method form or a method limitation/feature in a product-by-process claim, such claim was permissible only when the product “can not be described in any other manner”, the amended Claim 9 is not a product by process claim according to the above definitions. In re Dreyfus, 24 USPQ (BNA) 463 (CCPA 1935) (finding that claims were not product by process claims because they could be expressed in a manner other than by reference to the process with which the product is made); In re Moeller, 48 USPQ (BNA) 542 (CCPA 1941); and Ex parte Donahey, 126 USPQ (BNA) 61 (BOP1959).

(2) Even if the amended Claim 9 is a product-by-process claim, amended Claim 9 is not anticipated by the ‘149 Patent according to the current MPEP Chapter 2113 for product by process claim for the following reasons:

Pursuant to Chapter 2113 of the MPEP: “Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps” and “Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself.” The product disclosed in the amended Claim 9, a wiring connection device including at least a barrel pin and at least a wiring fastened in the barrel pin by a taper recess formed on the barrel pin for an electrical connection between the barrel pin and the

wiring, is different from that of the '149 Patent for the reasons described as follows.

(3) The wiring connection device proposed in the present invention is not taught/disclosed/suggested by the '149 Patent since the unique features "the wiring is fastened in the barrel pin by a taper recess formed on the barrel pin", as defined in amended Claim 9 and as shown in Figs. 2-3 (wiring 203, barrel pin 201, and taper recess 204), and as described on Paragraph [0011], line 3, on Paragraph [0013] line 3, and on Paragraph [0026], lines 3-9, of the specification of the present invention, are different from those of the '149 Patent. The reasons for this conclusion are further elaborated hereinafter.

(4) The '149 Patent does not teach/disclose/suggest that the wiring is fastened in the barrel pin by a taper recess formed on the barrel pin.

(5) One could draw a conclusion that amended Claim 9 is not taught/disclosed/suggested by the '149 Patent according to the aforementioned analyses and descriptions.

(6) The advantages of having the wiring fastened in the barrel pin by a taper recess formed on the barrel pin, as defined in amended Claim 9 of the present invention over the lead wire extending within the wire mesh cylinder (as disclosed in the '149 patent) and electrically connected to the cylinder so that a flexible connection is achieved between the circuit elements on opposite sides of the circuit

board and the lead wire as disclosed in Claims 1, 5 and 6 of the '149 Patent are that the taper recess (204) inwardly formed on the barrel pin by a taper tool can urge against the wiring (203) inside the barrel pin (201) so that the wiring (201) can have a relatively better performance for overcoming the pulling and twisting force and avoiding a rent solder on the printed circuit board as described in paragraph [0026] of the specification of the present invention because Claims 1, 5 and 6 of the '149 Patent claim only a connector with the 3D flexibility between the wire mesh cylinder and the lead wire instead. As for the connector having a lead wire soldered therein as disclosed in Claim 4 of the '149 Patent, which would have disadvantages that the present invention overcomes, as described on Paragraphs [0003] and [0004] of the specification of the present invention.

Applicant respectfully submits that from the above arguments, it is clear that amended Claim 9 of the present invention is not taught, disclosed, or suggested by the '149 Patent. Amended Claim 9 of the present invention is thus allowable. Accordingly, Applicant requests reconsideration and withdrawal of the rejection directed to Claim 9. Claims 10-14 are dependent from amended Claim 9 and therefore, these claims are also allowable.

Similarly, the amended Claim 15, which discloses a wiring connection device including at least two barrel pins and at least a wiring fastened in the barrel pins

by a taper recess formed on the barrel pin, is not taught, disclosed, or suggested by the '149 Patent for the same reasons as described above. Therefore, applicant respectfully submits that claim 15 is allowable over the cited prior art.

### **Claims 1-8**

Method claims 1-8 have been deemed inherently anticipated by the '149 Patent. Applicant respectfully submits that the method disclosed in the amended Claim 1 of the present invention is not taught, disclosed, or suggested by the '149 Patent. In the present invention, the proposed wiring connection device includes at least one barrel pin and at least a wiring fastened in the barrel pins by a taper recess formed on the barrel pin and the wiring connection device including at least two barrel pins and at least a wiring fastened in the barrel pins by a taper recess formed on the barrel pin as disclosed in Claims 9 and 15 respectively, of the present invention. These features are not taught, disclosed, or suggested by the '149 Patent as aforementioned and would not be obvious to one of ordinary skill in the art.

Based on the aforementioned, amended Claim 1 of the present invention is not inherent, or obvious in light of the '149 Patent. Therefore, the amended Claim 1 of the present invention is patentable over the '149 Patent. Accordingly, Applicant requests reconsideration and withdrawal of the rejection directed to Claim 1. Claims 2-8 are dependent from the amended Claim 1 and therefore, are also

allowable over the cited prior art.

Additionally, claim 16 has been added to further clarify that the barrel pin and if applicable, any electronic elements are applied to, and soldered to the printed circuit board prior to inserting and affixing the wiring into the barrel pin. As disclosed in the present application, performing these steps in this particular order, provides numerous advantages over the prior art, including the '149 patent. Namely, by performing these steps in this order, the wiring is not damaged by the soldering process (see e.g., paragraph [0023]) and the soldered end of the barrel pin is completely sealed prior to inserting the wiring, such that the wiring will not penetrate through the barrel pin when inserted and affixed (see e.g., paragraph [0025]). The apparatus disclosed in the '149 patent does not make the claimed steps "inherent" because the '149 patent does not disclose or make inherent the claimed steps to be performed in the claimed order.

### **Conclusion**

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

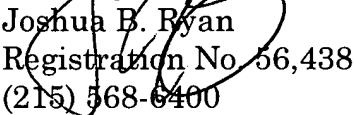
**Applicant: Chen et al.**  
**Application No.: 10/812,130**

The Applicant respectfully submits that none of the references cited by the Examiner render the amended Claims 1-16 obvious or anticipated. The present invention is patentable over the cited references, and reconsideration and allowance of the present application is requested.

Respectfully submitted,

Chen et al.

By

  
Joshua B. Ryan  
Registration No. 56,438  
(215) 568-6400

Volpe and Koenig, P.C.  
United Plaza, Suite 1600  
30 South 17<sup>th</sup> Street  
Philadelphia, PA 19103

JBR/kml  
Enclosure